

RCA

IP Phone



Please read this manual
before operating product
for the first time.

IP110

Interference Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; and (2) This device must accept any interference received, including interference that may cause undesired operation. Privacy of communications may not be ensured when using this phone.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna (that is, the antenna for radio or television that is "receiving" the interference).
- Reorient or relocate and increase the separation between the telecommunications equipment and Receiver.
- Connect the telecommunications equipment into an outlet on a circuit different from that to which the receiving antenna is connected.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions. Also, the Federal Communications Commission has prepared a helpful booklet, "How To Identify and Resolve Radio/TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Please specify stock number 004-000-00345-4 when ordering copies.

Warning: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The RCA IP110 phone is dedicated to business environment use. It is a full-featured and a flexible SIP solution. It is compatible with most IP PBX and VoIP providers.

Please read through the administrator's guide before installing your phone.

FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter."

This is a class B device, in a domestic environment; this product may cause radio interference, in which case the user may be required to take adequate measures. To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

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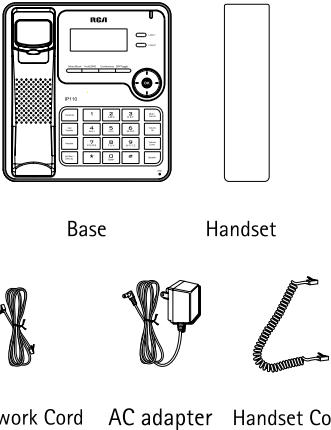
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Getting Started

Packing List

The following components are included in your package:

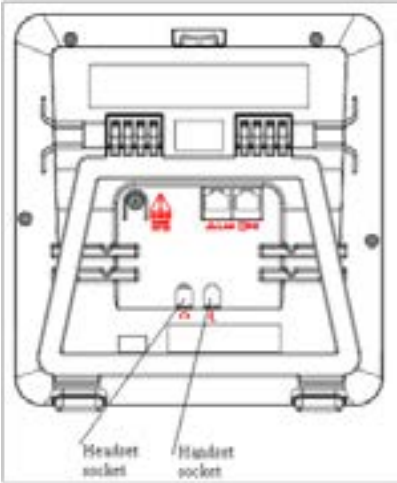
- IP110
- Handset & Handset Cord
- AC Adapter
- Ethernet Cable
- Quick Start Guide



Setting up your IP110

This section introduces how to set up the phone with the components in the packing list:

- Connecting the Handset Cord
- Connecting to the Network and Power.
- Connecting the Handset and Headset (not included)

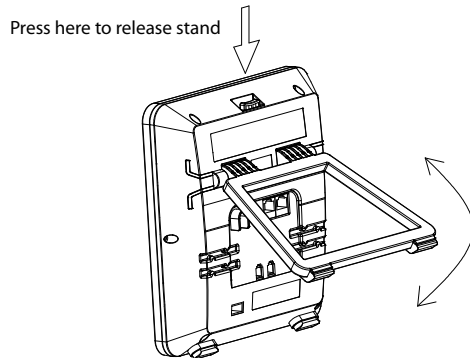
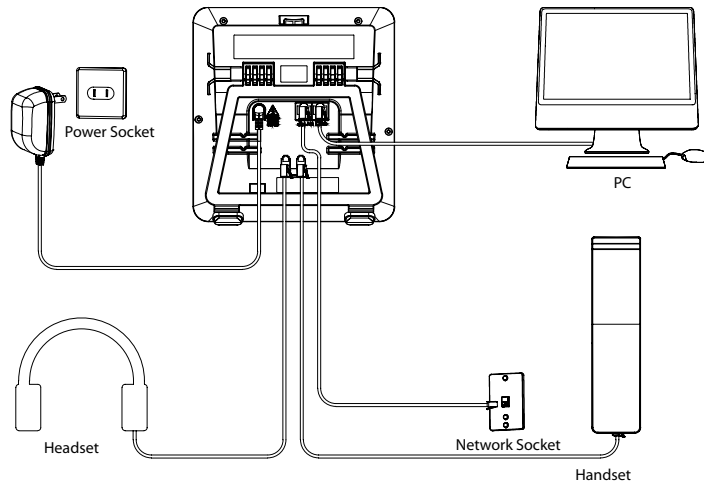


Connect Network and Power

Connect the phone to AC Power directly using the included power adapter.

The LAN Port can also be connected to Hub/Switch/IP PBX or other internet devices.

The phone can also share the network connection with other network devices such as a PC. Connect the phone's PC port to the computer's network port using an Ethernet cable.



Configuration and Registration

Some simple configurations are needed to get your phone ready for making calls: network and account information must be correct.

If you are not an administrator, please contact your internet administrator or service provider for more details.

Telephone Features and your VoIP Service Provider

Not all phone features are available with all VoIP service providers. Please make sure all features are properly configured with the service provider before installing the IP110.

Basic Configuration via Web Page

The IP110 features an embedded web server to help administrators and users configure, manage and use their phone in an intuitive and simple manner. The phone's web server can be accessed with any web browser.

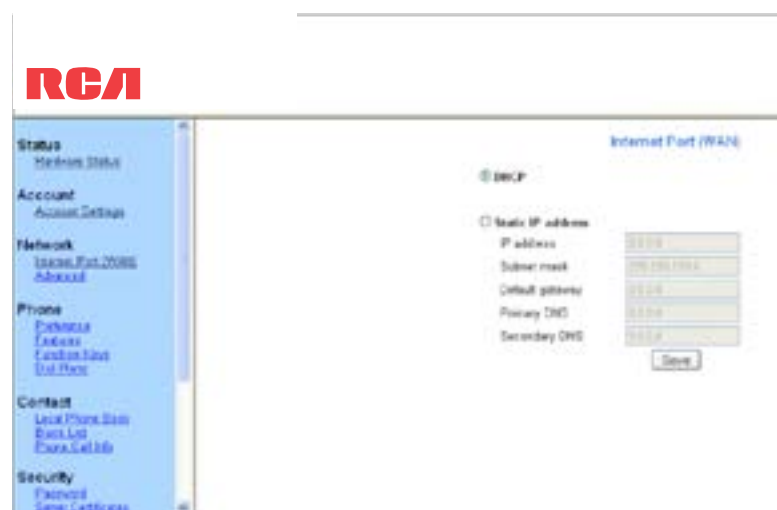
Press the OK button when the phone is in idle mode to find out your IP110's IP address. Enter it (for example <http://10.0.4.66>) into the address bar of your web browser. The default administrator's login name and password are admin/admin.

Network Settings

Click on NETWORK ⇌ INTERNET PORT (WAN) Settings.

DHCP: By default the phone attempts to contact a DHCP Server in your network in order to obtain its valid network settings, e.g. IP address, subnet mask, gateway, DNS server, etc.

Static IP Address: If your phone cannot contact a DHCP Server for any reason, you need to enter the network settings manually via Static IP Address. Please contact your network administrator for more details.



Account Settings

The phone attempts to register to the SIP server using the account data provided by automatic or manual initialization.

Click on ACCOUNT⇒ACCOUNT SETTINGS. Select Account to Account 1. You will find the following parameters:

Field	Description
Account Active	You can choose to Enable or Disable this account.
Label	The name shown on the LCD screen.
Display Name	What the phone will display on the other phone's Caller ID. This may be overridden by data at the service provider.
Register Name	Register name, provided by your service provider.
User Name	User name, provided by your service provider.
User Password	User password provided by your service provider.
SIP Server	SIP server address provided by your service provider.
SIP Server Port	SIP server port provided by your service provider. The default is 5060.



Fill the fields and press the SAVE button.

The phone will try to register to the SIP server.

If all accounts registering fail, the phone will display "No Service" by default.

Note: Should the IP PBX (SIP Server) require an authentication, a correct password is needed. Make sure you are using the appropriate input method or enter the password via the web user interface.

Basic Configuration using phone keypad

You will need admin privileges to perform this and other configurations. By default the phone will be in user mode, so you will need to perform a simple procedure to switch to admin mode.

Change phone to admin mode: Press MENU/BACK⇒7. User Type. Press the RIGHT navigation key until you see "admin" on the screen. Then press the DOWN key to be prompted for the password. It is "admin" by default. Type and press OK.

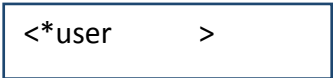
Network Settings: Press MENU/BACK⇒3. SETTINGS⇒2. ADVANCED⇒OK. Enter the admin password, and choose NETWORK->WAN PORT or VLAN or WEB TYPE or 802.1x Settings to enter the internet relating configuration page.

Account Settings: Press MENU/BACK⇒3. SETTINGS⇒2. ADVANCED⇒OK. Enter the admin password, and choose ACCOUNTS⇒OK to configure the account settings. Enter the following parameters:

Field	Description
Activation	Enable/disable the account
Label	What the phone will display on the other phone's Caller ID. This may be overridden by data at the service provider.
Display Name	The local phone name showing on the other phone when calling
Register Name	Register name provided by your service provider.
User Name	User name provided by your service provider.
Password	Account password provided by your service provider.
SIP Server	SIP server address provided by your service provider.

Press the UP and DOWN buttons to scroll through the parameter list and fill in proper information. Press the OK button to confirm.

Note:
The active User Type is shown with an * on the left of display when you enter MENU/BACK⇒7. User Type MENU/BACK, like this:



Once you finish all admin related tasks you should change back to user mode with the same procedure.

Overview



LEDs

Line Keys





LED Status	Description
Steady blue	The line is open
Blinking blue	There is an incoming call to the account, or there is a call on hold
Off	The phone is in idle status whatever registered / unregistered

Power Indication LED

LED Status	Description
Steady blue	You have new messages or new missed calls
Blinking blue	There is an incoming call or a call is muted
Slow blinking blue	The network is not available or SIP server failure
Off	IDLE MODE








Icons

The IP110 displays icons on its LCD, you can refer to the following table for their meanings:

Icon	Description
	Flashes when the internet is disconnected
	MISSED CALLS
	CALL IN
	CALL OUT
2aB	Input method: all letters and numbers
123	Input method: numbers

Icon

Description

abc	Input method: multi-lingual letters in lower case
ABC	Input method: multi-lingual letters in upper case
	CALL MUTE
	VOICEMAIL
	CALL FORWARD
AA	AUTO ANSWER
DND	DND
	In HANDSET mode
	In HEADSET mode
	In SPEAKER mode
	Keypad Lock

User Interface

There are two ways to customize specific options on your phone:

- Using the keypad and display of the phone.
- Using the Web user interface in an Internet browser from your PC; please refer to "Configuration and Registration" to get into the Web interface.

PHONE OPTIONS	PHONE UI	WEB UI
Status		
IP	✓	✓
MAC	✓	✓
Firmware	✓	✓
Network	✓	✓
Phone	✓	
Accounts	✓	✓
Call Features		
Forward	✓	✓
Call Waiting	✓	✓
Function Keys	✓	✓
Send Key	✓	✓
Hot Line	✓	✓
Anonym Call	✓	✓
DND	✓	✓
Logs Setting	✓	✓
Basic Phone Functions		
Language	✓	
Time & Date	✓	✓
Ring Tone	✓	✓
Phone Volume	✓	
Advanced Phone Functions		
Accounts	✓	✓
Network	✓	✓
Reset Factory	✓	
Set Password	✓	✓
Set AES Key	✓	✓
Auto Provision	✓	✓
Other Features		
Messages	✓	
History	✓	✓
Directory	✓	✓
User Mode	✓	

Note: 1) The above table only indicates most of phone functions rather than all of them. Please refer to next chapters for more details. 2) Some functions are password protected. In this case when you are prompted for a password make sure to introduce one in accordance with active User Type

The default administrator password is admin.

Maintenance Tasks

User levels

The phone allows three modes to configure the phone:

- User Mode
- VAR mode
- Administrator Mode

Administrator mode grants unlimited access to the phone configuration on both Web and Phone interface. User Mode is not able to access the settings on the Phone interface such as: Accounts, Network, Reset to Factory, other advance phone settings. VAR mode grants access to subset of Administrator functions (Login and password are var/var).

Administrator Mode

Administrator mode grants unlimited access to the phone configuration on both the web and the phone user interface. The administrator/user password is used to access:

- Web interface.
- The advanced settings of the phone, such as Network, Account and Reset to Factory settings via the phone interface.

The default administrator password for the phone interface is admin. The user name for the web interface access is admin and the password is admin.

To change the administrator password via Phone interface:

- 1) Make sure active User Type is admin
- 2) Press MENU/BACK⇒3. SETTINGS⇒2. Advanced
- 3) You are prompted to enter the required password.
- 4) Scroll to Set Password option, then press OK button.
- 5) You are prompted to enter the Current PWD, New PWD and Confirm PWD, Press DIR/TOGGLE to change the input method.
- 6) Press OK button to confirm the change, or MENU to return to previous menu.

To change the administrator password via Web interface:

Go to SECURITY⇒PASSWORD

Reboot

You should reboot the phone when you are asked to, e.g. after applying specific changes to phone configuration.

To reboot via Web interface:

- 1) Go to SYSTEM⇒UPGRADE.
- 2) Click REBOOT button.

Note: Please do not power off during reboot, or it may cause a flash memory error.

Customizing Your Phone

General Settings

Phone Status

You can view the status of your phone using the phone interface or the web interface. This option allows you to review:

- IP address
- MAC (Machine Access Control) address
- Firmware version
- Network: MAC, LAN, Netmask, Gateway, DNS, etc
- Phone: Model, Hardware, Firmware, Product ID and MAC
- Accounts: The status of the two SIP accounts

To check the Phone Status via phone interface:

Press OK button to check the IP. Use the navigation keys to check the other information.

To view the Phone Status via web interface:

Open a web browser and input the IP Address of the phone. Enter login and password (default login and password are admin and admin).

Select STATUS ⇒ HARDWARE STATUS.



Time and Date

Time and date are displayed on the idle screen. By default the date and time of the phone are configured manually, but you can set to obtain them from a preconfigured SNTP server, if needed. Please contact your system administrator if the time or date is incorrect.

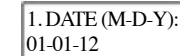
To change Time and Date via the Phone interface:

Press MENU ⇒ 3. SETTINGS ⇒ 1. BASIC ⇒ 1. TIME & DATE ⇒ OK.



If SNTP is chosen, the phone will automatically get the time from an NTP Server. Use the UP and DOWN navigation keys to select the specific options and change parameters to meet your needs. You can set Time Zone, NTP Server respectively.

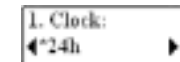
If Manual is chosen, the time can be set manually. Use the UP and DOWN navigation keys to select the option and enter the specific date and time.



Press the OK button to save your changes. Or press MENU/BACK key to return to the previous screen.

To set time format via the Phone interface:

Press MENU/BACK ⇒ 3.Settings ⇒ 1.BASIC ⇒ 1.TIME & DATE ⇒ 3.TIME & DATE ⇒ OK.



Use the LEFT and RIGHT navigation keys to choose a preferred time format: 12 hour or 24 hour.

Press the OK button to save the changes and return to the previous screen.

Note: By default date and time setting is set to "Manual".

Keypad Lock

You can lock the menu key of your phone to protect it from unauthorized use. When the menu key is locked, you can't access the menu of the phone.

To enable the lock via Phone interface:

Press MENU/BACK ⇒ 3. SETTINGS ⇒ 2. ADVANCED, enter the password of current user type, and then press OK button.
Scroll down to Keypad Lock and press OK.
Use the LEFT or RIGHT navigation keys to change to "MENU KEY".
Press OK button to active the change, or MENU button to return to the previous screen. The icon will be displayed on the top right corner of the idle screen.

To unlock the phone via Phone interface:

Press MENU key, you are prompted for the password.
Enter the password of current user type, and then press OK button, you can enter the main menu and the keylock function is disabled as well.

To enable keypad lock via Web interface:

Choose Phone Preference web page to change the Keyboard lock option.

Audio Settings

Volume

Handset, speaker, headset and ringer volumes can be adjusted independently.

To adjust the volume in idle mode:

Press MENU/BACK ⇒ 3. SETTINGS ⇒ 1. BASIC.

Scroll to 3. Phone Volume, and press OK button. Select the item you wish to adjust and use VOLUME UP and VOLUME DOWN or LEFT and RIGHT navigation keys to increase or decrease volume.

Press OK button to save volume change or MENU key to cancel.

To adjust ring volume you can also press VOLUME UP and VOLUME DOWN when the phone is in idle status.

To adjust the volume when you are in an active call:

When handset/headset/speaker mode is activated, press VOLUME UP or VOLUME DOWN to adjust the volume.

Note: The volume can only be adjusted via Phone interface.

Ring Tones

There are seven unique ring tones on the IP110.

To select Ring Tone Type via Phone interface:

Press MENU/BACK ⇒ 3. SETTINGS ⇒ 1. BASIC ⇒ OK.

Scroll to 2. RING TONE, and press OK button.

Use the UP and DOWN navigation keys to select your selection. A sample of each tone will be played.

Press OK button to save the change or MENU/BACK to cancel.

Codec Selection

The IP110 supports the following voice codecs:

-PCM u-law, PCM a-law, G.729, G.722, G.726, iLBC, iLBD-20

You can enable/disable the desired codecs via Web interface. Please contact your System Administrator for more details about the codecs.

To enable/disable the codecs via web interface:

Choose ACCOUNT ⇒ ACCOUNT SETTINGS (Account 1/Account2)

Select the desired codecs in Codecs section.

Click Save button to save the change.



Note: Codec Selection can only be done via Web interface.

Contact Management

Edit/Add/Delete Contacts

The IP110 features a 300 entry phonebook and 10 speed dial keys. With the phonebook you can add, edit, delete, dial, search for a contact or create groups of contacts.

The phonebook also includes a Blacklist feature to block unwanted calls.



To add a contact via Phone interface:

Press DIR/TOGGLE and the OK button

Or

MENU/BACK⇒6. DIRECTORY⇒1. DIRECTORY.

Press OK button to enter into the Contacts list, press UP navigation key to select the ADD option, Press the OK button, and enter a Name for your contact. Then press the DOWN navigation key to enter phone number of the contact via the keypad. Use the DIR/TOGGLE key to select between numeric and upper/lower case alphanumeric modes.

Press the DOWN navigation key to select if you would like this contact to be associated with a specific VoIP account on this phone. The default is Auto.

Press DOWN navigation key to set and choose a special ring tone for the contact. If you want to assign this contact to a group, use the DOWN navigation key to select the group.

Press OK button to add the contact, or the MENU/BACK key to cancel the change.

To add a Group via Phone interface:

Press DIR/TOGGLE and OK button or
MENU/BACK⇒6.DIRECTORY⇒1.DIRECTORY.

Use the LEFT and RIGHT navigation keys to choose AddGroup, press the OK button to enter to the Add Group page.

Enter the group name and choose a ring tone to be associated with this group.

Press OK button to save.



To configure the speed dial keys via Phone Interface:

Press MENU/BACK⇒2. FEATURE⇒2. FUNCTION KEYS ⇒2. MEMORY KEYS

Use the UP and DOWN navigation keys to select the key on which you want to store a contact number, press the OK key to confirm

Use the RIGHT and LEFT navigation keys to select Speed Dial, then use the UP and DOWN keys to select Account if you want to assign this speed dial keys to a specific account. Use the UP and DOWN navigation keys to select Value, enter the desired number and press OK key to confirm.

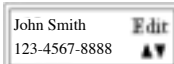
To use a Speed Dial key, simply hold DOWN the desired key for 2 seconds. The IP110 will automatically begin dialing that selection.

To edit/delete a contact via Phone interface:

Press DIR/TOGGLE ⇒1. DIRECTORY or MENU/BACK⇒6. DIRECTORY ⇒1. DIRECTORY

Use the UP and DOWN navigation key to select the contact list (e.g. 1.Contacts) and press the OK button.

Use the UP and DOWN navigation key to select the contact you want to edit or delete, then press LEFT/RIGHT navigation keys to select Edit or Del and press the OK button.



If you select Edit, you will be able to change the Name, Numbers, Account, Ring-tone and Group of the selected contact. Make the desired changes, press the OK button, or press MENU return to previous menu. If you select Del, the phone will ask if you are sure you wish to delete this contact. Press OK again, and the contact will be deleted.

To move a contact to the Blacklist via Phone interface:

If you add a contact to the blacklist your phone will automatically reject all calls from this contact.

Press DIR/TOGGLE ⇒ 1. DIRECTORY or MENU/BACK ⇒ 6. DIRECTORY ⇒ 1. DIRECTORY

Use the Up or DOWN navigation key to select the contact list (e.g. 1.Contacts) and press the OK button.

Use the Up or DOWN navigation key to select the contact you want to move to blacklist, then press LEFT or RIGHT navigation keys to select M2B.



Press the OK button, or press MENU to return to previous menu.

A warning message will ask for confirmation to move the contact to the Blacklist. Press the OK button to confirm the operation, or press the MENU button to return to the directory.

To move a contact from Call Log to Contacts via Phone interface:

Press MENU/BACK ⇒ 5. HISTORY, or use the LEFT key shortcut

Use the navigation keys to select a record, then press the DIR/TOGGLE key to enter the edit page. From here you can give the contact a name, add additional phone numbers, change the account association or give a VIP ringtone to the contact.

Press the OK key to save the contact.

To search a contact via Phone interface:

Press DIR/TOGGLE ⇒ 1. DIRECTORY

Or

MENU/BACK ⇒ 6. DIRECTORY ⇒ 1. DIRECTORY

Use the Up or DOWN navigation key to select the contact list (e.g. 1.Contacts) and press the OK button.


Press a key on the dial pad to enter the search mode. Enter the contact name to be searched for and press the OK button. Contact list will be searched for matching records.

Basic Call Functions

Outgoing calls


Call Devices

You can make a phone call via the following devices:

Pick up the handset,  icon will be shown on the screen.

Press the SPEAKER button, and this icon  will be shown on the screen.

Press HEADSET button if a headset is connected to the headset Port.

This icon  will be shown on the screen. Pressing the HEADSET button again will hang up the headset.

Note: You can dial the number first, and then choose the device you will use for your call.

Call Methods

There are several ways to initiate a call:

1. Press an available Line button and dial the number you want to call, or
2. Dial a number and press the SPEAKER button, the HEADSET button or pick up the handset, or
3. Go to Directory, use the navigation keys to select the desired contact, or
4. Press the LEFT navigation key to enter the call log interface, then use the navigation keys to make your selection (press LEFT/RIGHT button to choose All Calls, Dialed Calls, Received Calls, Missed Calls and Forwarded Calls) or
5. Press the UP navigation key to enter the Dialed Calls interface, then choose a record to dial out or
6. Press and hold a key on the dial pad that has been set as speed dial key.

To terminate a call you can:

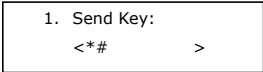
1. Press the MENU/BACK key or
2. If you are in handset mode, replace the handset on hook or
3. If you are in speakerphone mode, press the speaker key

Send Key configuration

Admin can set a specific button ("#" or "**") as the send key. If this feature is enabled, once you've dialed the desired number, you can press this send key to call your correspondent immediately.

To set the send key via the IP phone interface:

- 1) Make sure active User Type is admin or var.
- 2) Press MENU/BACK ⇒ 2. FEATURES⇒ 4. SEND Key to enter the configuration page.



- 3) Press the LEFT/RIGHT navigation keys to choose a button that you want to use as the send key: "#", "**", or disable this option. Note that currently active option has an "*" on the left.
- 4) Press the OK button to save the changes, or MENU to cancel.

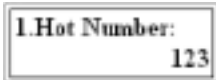
Hot Line

Hot Line allows your phone to dial a number automatically if it has been off hook for a specified time period and no keys have been pressed. Both destination number and timeout can be configured.

The service is enabled if Hot Line Number has been configured.

To set the hot line number via the IP phone interface:

Press MENU/BACK⇒2. FEATURES ⇒3. HOT LINE to enter the configuration page. (if the active user type is admin or var , press MENU/BACK ⇒2. FEATURES ⇒5. HOT LINE)



Enter the hot line number and press UP or DOWN navigation key to select HotLine Delay. Set the Hot Line Delay (default is 4 seconds), then press the OK button to save the changes.

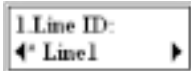
Anonymous call

Anonymous call, also known as Caller ID restriction, allows a user to request the network to hide their identity when they are performing outgoing calls. The IP110 supports Permanent Caller ID restriction, meaning that while enabled all calls will request to be anonymous and the user will need to disable the feature if they want their identity to be transmitted. This service can be performed locally or by sending an activation code to the network, depending on your network. Additionally the IP110 allows users to automatically reject anonymous incoming calls.

These services can be managed through both phone and Web interfaces.

To set Anonymous call via phone interface:

- 1) Press MENU/BACK⇒2. FEATURES ⇒4. ANONYM CALL to enter the configuration page. (if the active user type is admin or var , press MENU/BACK ⇒ 2. FEATURES⇒6. ANONYM CALL)



- 2) Use LEFT or RIGHT navigation keys to select the account to be anonymous.
- 3) Press DOWN navigation key to display "Block CID", then press LEFT or RIGHT navigation keys to enable/disable the anonymous call function.
- 4) If you want to perform this function locally, press OK to save your changes.
- 5) If your user type is admin and you would like to activate this function in your service provider please press DOWN key and enter the Anonym On Code and Anonym Off Code. Whenever you enable/disable the anonymous call function on your phone, it will automatically send these codes to the server.
- 6) Press OK to save your changes, or MENU to cancel.

To set Anonymous call rejection using phone interface:

- 1) Press MENU/BACK⇒2. Features ⇒ 4. Anonym Call to enter the configuration page.
- 2) Press the UP or DOWN navigation keys to enter the Rejection page (if the active user type is admin or var , press MENU/BACK ⇒ 2. FEATURES ⇒ 6. ANONYM CALL).
- 3) Press RIGHT or LEFT navigation keys to enable/disable Anonymous Call Rejection function.
- 4) If your user type is admin and you would like to use your service provider to get this service , please press the DOWN key and enter the Rejection On Code and Rejection Off Code. Whenever you enable/disable the Rejection option on your IP phone, it will automatically send these codes to the server.
- 5) Press OK to save your changes, or MENU to cancel.

Note: To manage Anonymous Calls and Rejection codes you need to have admin or var rights. Check active User Type before attempting to configure using phone interface.

Dial Plan

A dial plan establishes the expected number and pattern of digits for a telephone number. This includes country codes, access codes, area codes and all combinations of dialed digits.

Dial plans can be used for least cost routing, dialing convenience or to prevent users from calling specific numbers or groups of numbers.

Dial plans require admin or var privilege.

The entire dial plan is enclosed in brackets (). Each dial plan is pipe separated (|). The dial plan can include the digits 0 to 9, * and #. "x" represents any digit from 0 to 9. Repetition (i.e. x.) represents any digit (x) repeated 0 or more times. Big letter T means to dial the numbers immediately after the dial plan sequence is matched (e.g. 1234T). Square brackets [] are for digit matching. For example, [578] xxx will match any four digit sequence starting with either 5, 7 or 8. [5-8]xxx will match any four digit sequence starting with 5, 6, 7 or 8.

Here is a dial plan example:

(111T|[0-4] xxxxxxxxT)

111T This will dial 111 immediately after you entered the third digit.
[0-4]xxxxxxxT Any 9-digit number starting with 0,1,2,3 or 4 will be dialed out immediately after you enter the 9th digit.

To create a Dial Plan in the web interface, use the following fields:

- Dial Plan: Enter the dial plan here
- DP Enable: To enable or disable the dial plan
- Dial Plan tmo: Timeout before phone converts the dialed number according to dial plan (if enabled)
- Dial End tmo: Timeout before phone makes the call after the last digit of the number is entered
- Dial End tmo Enable: To enable or disable the Dial End timeout.
- Hook Off tmo: Timeout for the unit to go back to standby mode after the handset is off hook
- Hook Off tmo Enable: To enable or disable the Hook Off timeout

Incoming calls

Answering an incoming call

- 1) Lift the handset or press the SPEAKER button to answer using the speaker-phone, or press the HEADSET button to answer using the headset.
- 2) If you are already talking on the phone, press the corresponding LINE key or OK button to answer the new call.

During the conversation, you can alternate between handset, headset and speakerphone by pressing the corresponding buttons or picking up the handset.

Rejecting an incoming call

Press the MUTE/CANCEL key to reject an incoming call directly.

DND

When DND function is enabled, the phone will display the DND icon and all incoming calls will be rejected. You can find a record of all the calls that were rejected in the incoming call record of the Call History. Pressing HOLD/DND in idle mode will activate or deactivate the DND function.

To configure the DND function via Phone interface:

- 1) Go to MENU/BACK⇒2. FEATURES⇒5. DND to enter the configuration interface.
- 2) Use the RIGHT or LEFT navigation keys to choose Enable/Disable.
- 3) Press the OK button to save the changes.
- 4) Choose DND option again to deactivate DND mode.

You can also DND function using DND Codes if your IPPBX or server provides this function:

- 1) If your user type is admin go to MENU/BACK⇒2. FEATURES⇒5. DND to enter the configuration interface.
- 2) Set the DND On Code and the DND Off Code by pressing UP or DOWN navigation keys, then press the OK button to save the changes.
- 3) When you select to enable/disable the DND function it will send these codes to the server, and the server will turn on/off the DND function. In this case, any calls addressed to the phone's extension will be rejected by the server automatically, and will not be included in the Call Log.

Note: When DND is locally enabled, the corresponding icon will be shown in the display.

CALL FORWARD

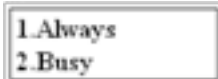
This feature allows you to divert an incoming call to another phone number like a cell phone or voice mailbox.

The following CALL FORWARDing events can be configured:

- Always: Incoming calls are immediately forwarded.
- Busy: Incoming calls are immediately forwarded when the phone is busy.
- No Answer: Incoming calls are forwarded when the phone is not answered after a specific time period.

To configure CALL FORWARD via Phone interface:

- 1) Go to MENU/BACK⇒2. FEATURES⇒1. FORWARD. You can also press the DOWN navigation button to enable/disable CALL FORWARD when the phone is in idle mode.



- 2) There are 3 options: Always, Busy and No Answer. Select using 1, 2 or 3.
- 3) Enter the phone number to which calls will be forwarded. For No Answer you can also select the No Answer timeout pressing the DOWN navigation key.
- 4) If you prefer the server to perform this function, please enter the On Code and Off Code options. When you choose to enable the call forward function via your IP phone it will send the corresponding code to the server, which will take care of forwarding your calls. In this case, forwarded calls will not be stored in the Call Log.
- 5) Press the OK button to save changes.

Notes:

1. While an incoming call is ringing, if you press CALL TRANSFER you can dynamically forward the call to a desired number.
2. You can quickly enable/disable Forward by pressing DOWN key from idle mode. Forward type and target number will be the last ones configured using the menu.
3. Only admin/var can set the On/off codes. Make sure the right User Type is active.
4. When CALL FORWARD is enabled, the corresponding icon will be shown on the display ➡
5. "FWD To ..." will be displayed on the idle screen after an incoming call was forwarded. Users can press the MUTE/CANCEL button to clear the message.

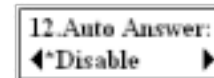
Auto Answer

Auto Answer allows an incoming call to be answered without requiring any action by the user. This function is set on a per account basis.

This function can only be enabled/disabled by admins or vars.

To set Auto Answer via the IP phone interface:

- 1) Make sure active User type is var or admin.
- 2) Press MENU/BACK⇒3. SETTINGS⇒2. ADVANCED, enter the password and press OK button.
- 3) Then choose 1. ACCOUNTS⇒LINE X to enter the configuration page, use the UP and DOWN navigation keys to choose Auto Answer option.







- 4) Use the LEFT or RIGHT navigation keys to enable or disable the auto answer function. The default is Disable.
- 5) Press the OK button to save the changes.

To set Auto Answer via Web interface:

- 1) Go to ACCOUNT⇒ACCOUNT SETTINGS page
- 2) Go to BASIC ⇒AUTO ANSWER option.
- 3) Select Enabled or Disabled in the pull-down menu, click Save button to save the change.

Call log

The IP110 can store up to 100 calls in its Call log. There are 5 different lists:

- All calls
- Forwarded calls 
- Missed calls 
- Received calls 
- Dialed calls 


The call logs can be accessed through the web interface (Contact⇒Phone Call Info). In the next paragraphs we will explain how to access them from the phone interface.

Accessing Call log

You can access the Call Log by pressing the LEFT navigation key from idle mode. You will be in the "All Calls" list, where calls are sorted sequentially, and each call is marked with the corresponding icon.

To change list type, use the RIGHT navigation key. Note the icons at the top of the screen which indicate the list you are on.


Accessing Missed Calls list

You can access the Missed Calls list by pressing the LEFT navigation key from idle mode to reach the Call Log and then RIGHT navigation key twice as explained above. When you are in the Missed Calls list you should see the  icon on the screen.

Accessing Dial Calls list

You can access the Dialed calls list directly by pressing the UP navigation key from idle mode.

You can also access this list by pressing LEFT navigation key to enter the Call Log, and then LEFT navigation key again.

When you are in the Dialed Calls list you should see  icon on the screen.

Call list items management

When you are in a call list, you can:


- 1) Dial the current entry by pressing the OK key, or
- 2) Store it in the Directory by pressing the DIR/TOGGLE key, or
- 3) Delete it using the MUTE/CANCEL key

During an Active Call

Mute

This function allows you to mute the microphone of your phone during a call; you cannot be heard by the other party. You can still hear all other parties while mute is enabled.

To mute/resume the conversation:

Press MUTE/CANCEL button during a conversation to mute the current call. The icon  will be shown on the LCD, and the power indication LED will blink. Press MUTE/CANCEL again to unmute the call.

Call Hold

This call function allows you to place an active call on hold. In this case your IP PBX might play a melody or message to the other party while waiting. Other calls can be received and made while having a call on hold.

To hold/resume a call:

Press HOLD/DND button to put your active call on hold.

If there is only one call on hold, press HOLD/DND button again to retrieve the call.

If there is more than one call on hold, press the UP/DOWN navigation keys to select the desired call, then press HOLD/DND button again to retrieve the call.

Call Waiting

This call feature allows your phone to accept incoming calls even when you are currently on a call.

Handling a waiting call

By default Call Waiting is enabled, and when an incoming call is received during another active call a short tone will be played.

In this situation, user can:

- 1) Accept the second call using the OK key. The first one will be put on hold automatically. Or
- 2) Reject the call using MUTE/CANCEL button
- 3) Ignore the incoming call

Call Waiting Configuration

To configure Call Waiting via Phone interface:

- 1) Make sure active User Type is admin or var
- 2) Press MENU/BACK⇒2. FEATURES⇒2. CALL WAITING.
- 3) Use the LEFT or RIGHT navigation keys to enable/disable the call waiting feature.
- 4) Use the navigation keys to enable/disable the Play Tone option. This option is used to define whether to play a short tone when there is an incoming call during an active call.
- 5) Press the OK button to save the changes, or MENU/BACK to return to the previous menu.

Call Transfer

This call function allows your phone to transfer an active call to another phone :

Blind Transfer, Attended Transfer and Semi-Attend Transfer are supported.

To make a Blind Transfer via phone interface (no prior announcement of the call):

- 1) Press the CALL TRANSFER button during an active call, placing the call on hold.
- 2) Dial the second phone number and press the CALL TRANSFER button to complete the transfer.

To make an Attended Transfer via phone interface (with prior announcement):

- 1) Press the CALL TRANSFER button during an active call, putting the call on hold.
- 2) Dial the second phone number.
- 3) When the call is answered, press the CALL TRANSFER button to complete the transfer.

To make a Semi-Attended Transfer via phone interface (no prior announcement of the call):

- 1) Press the CALL TRANSFER button during an active call, putting the call on hold.
- 2) Dial the second phone number.
- 3) While third party's phone is ringing, press the CALL TRANSFER button or hang up.

Note: Make sure that the service provider you have registered with supports this function.

3-way Conference

Your IP110 can establish a three-party conference by using both lines.

To establish a conference via the phone interface:

- 1) Once a call has been connected with the 1st caller, press the CONFERENCE button, placing 1st caller on hold.
- 2) Dial 2nd party number.
- 3) Once connected with the 2nd party, press the CONFERENCE button to establish the conference.
- 4) Hang up to disconnect all parties.

Voicemail

Your voicemail messages, stored in your local or hosted VoIP telephony system, can be accessed from your phone.

New voice messages can be indicated both acoustically and visually as described below:

The idle screen will indicate the new voice messages.

The VOICEMAIL button backlight will be on.

The LED of the phone will turn solid blue.

Voicemail settings

To configure the voicemail code via Phone interface:

- 1) If your user type is admin go to MENU/BACK⇒4. MESSAGES⇒ 2. SET VOICE MAIL.
- 2) Use the navigation keys to select the Line you want to set, enter the number to connect to your system voicemail. You can press DIR/TOGGLE to choose the proper input method.
- 3) Press the OK button to save the changes, or press MENU/BACK to return to the previous menu.

Note: Please contact your system administrator for the voicemail code. Different systems have different codes.

To configure voicemail settings using the Web interface:

- 1) Go to ACCOUNT⇒ACCOUNT SETTINGS and set voicemail number.

Retrieving your voicemail messages

To check your voicemail status via the Phone interface:

- 1) Press MENU/BACK⇒4. MESSAGES⇒1. VIEW VOICE MAIL.
- 2) You can view your messages (new and old messages).

To listen to your new messages via the Phone interface:

- 1) Press the VOICEMAIL button directly.
- 2) You may be prompted to enter the password which is needed to connect to your VoIP telephony system.
- 3) Your voice mailbox is connected and you are able to listen to your new and old voicemails.

Note: Before retrieving a new VOICEMAIL, please make sure that the connecting code has been set on the phone. If you have more than one account set on the phone, when pressing the VOICEMAIL button you will be calling the active account mailbox.

Advanced Functions

Account Setting

Please refer to "Configuration and Registration" chapter for the basic account setting information. The following table lists the parameters in Advanced Account Setting section of the web interface.

Field Name	Description
Local SIP Port	Local SIP port. The default value is 5060.
DTMF Type	Select DTMF type.
Session Timer	This toggles the Session Timer on or off.
Session Initiation Protocol (SIP).	This extension allows for a periodic refresh of SIP sessions through a re-INVITE or UPDATE request. The refresh allows both user agents and proxies to determine if the SIP session is still active.
Voice Encryption (SRTP) ptime(ms)	Voice Encryption (SRTP) The time between two RTP packets of the current used codec
SIP Server Type	The type of SIP Server

You can only configure these settings via Web interface:

- 1) Go to ACCOUNT ⇒ ACCOUNT SETTINGS.
 - 2) Select desired account.
 - 3) Make desired selections in Advanced section.
- Check with your system administrator or service provider for more information.

Network Settings

Please refer to chapter "Configuration and Registration" for the Basic Network WAN setting information. In the next paragraphs we will describe other Network related settings.

Advanced Network Settings

VLAN

VLAN is a group of hosts with a common set of requirements that communicate as if they were attached to the Broadcast domain, regardless of their physical location.

The IP110 supports 802.1p and q packet tagging. VLAN ID and Priority can be set via phone or web interface.

To configure VLAN settings via Phone interface:

- 1) Make sure the active User Type is admin or var
- 2) Press MENU/BACK⇒3. SETTINGS⇒2. ADVANCED.
- 3) Enter the password required, scroll to Network option, press OK button and select VLAN, then press OK to enter.
- 4) Choose WAN Port and press OK button to enter.
- 5) Use the LEFT or RIGHT navigation keys to choose and set the VLAN Status; input the VID Number, Priority.
- 6) Press OK button to save the settings, or MENU/BACK to return to VLAN menu.

To configure VLAN settings via Web interface:

Choose NETWORK⇒ADVANCED. Perform necessary changes. Check with your system administrator for more information.

HTTPS

The IP110 supports HTTPS (Hypertext Transfer Protocol over Secure Socket Layer). Adding SSL layer under HTTP, adds a security layer to HTTP. Admins can set this transmission mode via web page.

To configure HTTPS settings via Web interface:

Go to NETWORK⇒ADVANCED, choose Web Server option. In the pull-down menu of Type field, choose the transmission mode, then click the CONFIRM button to save the changes.

802.1X

IEEE 802.1X is an IEEE Standard for port-based Network Access Control (PNAC). It is part of the IEEE 802.1 group of networking protocols. It provides an authentication mechanism to devices wishing to attach to a LAN, either establishing a point-to-point connection or preventing it if authentication fails. It is used for securing wireless 802.1x access points and is based on the Extensible Authentication Protocol (EAP).

This IP phone supports 802.1X. For the details, please consult your system administrator or technical support.

Reset to Factory

You should reset the phone only when the phone configuration has been changed and the phone is no longer functioning anymore. To maintain the configuration of the phone, please see a network administrator or service provider for assistance.

To reset to factory via phone interface:

- 1) Make sure active User Type is admin or var.
- 2) Press MENU/BACK⇒3. Settings⇒2. Advanced.
- 3) You are prompted to enter the required password.
- 4) Scroll to Reset Factory option, then press OK button.
- 5) You are prompted to confirm the change, press OK to reset to factory settings, or MENU/BACK to return to previous menu.

It will take a few minutes to reset, please do not power off during resetting, or it will cause flash memory error.

Note: If you perform a factory reset, current settings including contact list, call history, account settings, etc will be lost.

Your phone will have to be configured manually or reprovisioned.

Firmware Update and Autoprovisioning

The phone is delivered with pre-installed firmware. To update the phone's firmware, please contact your system administrator. You can only update the firmware via Web interface.

To update the firmware manually via Web interface:

Choose SYSTEM⇒UPGRADE; select the firmware file in your local computer.

Click UPGRADE button to update the new firmware.

Please do not power off during updates.

To update the firmware and configuration automatically, you can use auto provisioning.

Note: Please check with your network administrator for the Autoprovisioning guide.

To launch Autoprovisioning using web interface:

Go to SYSTEM⇒PROVISIONING Settings

Set Auto Provision via phone interface:

- 1) Go to MENU/BACK⇒3. SETTINGS⇒2. ADVANCED
- 2) You are prompted to enter password
- 3) Scroll to 7. Auto Provision and press OK button.

Enter the URL, User Name and Password (optional).

Click OK key to save the changes and reboot the phone.

Note: Any power interruption during the subsequent process will most likely lead to a flash memory error. As a result the system may not initiate. The procedure can be only conducted in Administrator Mode. The upgrade priority is first the DHCP option field, then the preconfigured URL field.

Decryption

Your IP110 supports configuration file encryption for provisioning. In case encryption is used, AES key needs to be configured on the phone.

Set AES key via Web interface:

Go to SYSTEM⇒PROVISIONING Settings

Note: You can ask your system administrator for the decrypt password.

Set AES Key via phone interface:

Go to MENU/BACK⇒3. SETTINGS⇒2. ADVANCED⇒6. Set AES Key.



Enter the Common AES and the MAC-oriented option.

Press the OK button to save the changes.

System Log Export

To help with troubleshooting, users can export the system log and send it to the network administrator for diagnosis.

To enable the system log capture via phone interface:

- 1) Make sure the active User Type is admin
- 2) PRESS ⇒ 2. FEATURES ⇒ 8. LOGS SETTING
- 3) Use the LEFT and RIGHT navigation keys to choose ENABLE
- 4) Press the OK button to save the changes
- 5) Reboot the phone

To enable the system log capture via web interface:

- 1) Go to SYSTEM ⇒ LOG SETTINGS
- 2) Change the "Print Enable" to Enable
- 3) Press the SAVE button.
- 4) After the Log Settings is saved successfully, reboot the phone

To export the system log via web interface:

When the desired data is collected, follow these steps to export the system log.

- 1) Go to SYSTEM ⇒ LOG SETTINGS in the web interface
- 2) Press the "EXPORT" button
- 3) After the log file is created successfully, press the link "SAVE IT LOCALLY" to download the log file.

Keys configuration

Send Key configuration

Admins can set a specific button ("#" or "'") as the send key. If this feature is enabled, once you've dialed the desired number, you can press this send key to call your correspondent immediately.

Please check Send Key configuration in Basic Calls chapter for a complete description.

Programmable keys

The keys from 0-9 (memory keys) on the keypad are editable. Users can customize specific features for these keys according to their needs. (The keys are only available when the phone is in idle mode).

This function can only be set via the Web interface:

PHONE⇒FUNCTION keys (Memory Key)

Configuration of function keys for idle mode is:

- Up key: access to dialed list
- DOWN key: access to CALL FORWARD
- LEFT key: access to call log
- RIGHT key: access to account switch
- OK key: access to status
- DND key: access to DND

Line keys Configuration

The phone has 2 line keys to which functions can be assigned out of a list of functions. The following list shows the functions you can set on the Line keys. The next paragraphs provide a description for each function. The default configuration for each key is Line.

- Line
- Speed Dial
- Conference
- Transfer
- Hold
- DND
- Call Return
- Pick Up
- Call Park
- Voicemail
- Prefix
- Redial

Note: Many of those features require IP PBX or service provider support and hence must be configured in the server first in order to work on your phone. Contact your system administrator or Technical support for more details.

In addition, please note that not all the servers support the above-mentioned features.

Line

The most frequent use for the line keys is assigning them one of two possible user accounts for call management.

To assign the key as a Line via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Speed Dial

You can configure the key as a simplified speed dial key. This key function allows you to easily access the most frequently dialed numbers.

To assign the key as a Speed Dial via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Conference

You can configure the Line key to be used as a conference key while remaining in the current call. This key allows a user on a call to conference another party while remaining in the conference.

To assign the key as Conference via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Transfer

You are able to configure a key as a TRANSFER key to perform a Blind/Attended/Semi-Attended Transfer. The main difference this key and the CALL TRANSFER hard key is in this case you can pre-configure the number to which transfer will be performed. This is very useful when there are only a few numbers to which you usually transfer calls.

To assign the key as the Transfer key via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Hold

The key can be configured as a HOLD key. You can use this key to hold and retrieve a call during the conversation.

To assign the key as Hold via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

DND

If the key is configured as DND key, it will work as a toggle key to enable/disable this service.

Please check DND chapter in the Incoming calls section of Basic Call Functions chapter for more information about this function.

To assign DND to a key via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Call Return

Call Return function dials out the last number from which you received a call. If there is already an active call, when pressing Call Return key the first call will be put on hold and a new one will be sent to the Call Return number

To assign Call Return to a key via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Pick Up

Pickup key allows you to perform call capture from another ringing station with a single key press. This feature is not supported by all servers. Please check with your service provider or network administrator for more details.

To assign Pick Up to a key via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Call Park

Call Park is a feature that allows a person to put a call on hold at one telephone set and continue the conversation from any other telephone set. Your server needs to support this feature. Please check with your service provider or IP PBX vendor for more details.

The "call park" feature is activated by pressing a preprogrammed button or a special sequence of buttons.

To assign the key as Call Park via web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Voice Mail

When the key is configured as a voicemail key you can access voicemail quickly by pressing this key.

To assign the key to Voice Mail via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Prefix

When you press a key in which prefix function has been set up, the phone will automatically dial the prefix and you will only have to dial the rest of your correspondent number to call him out. Prefix can only be assigned to the line keys.

To assign the key as Prefix via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Redial

If a key is configured as Redial key:

- If you press this key in idle status, it will enter the Dialed Calls interface
- If you press this key in off hook mode, last dialed number will be sent directly
- If you press this key when there is an active call, it will be put on hold and a new call sent to the last dialed number

To assign Redial to a key via the web interface:

Go to PHONE⇒FUNCTION Keys (Line Key)

Trouble shooting

I cannot register to the server

Check the IP address (press OK key for status).

Check your gateway.

Check your DNS server.

Make sure your account information is the same as you got from your service provider.

Check whether the SIP server is on.

Check the SIP register port, the default value is 5060.

I can't get an IP address

Make sure you have plugged the Ethernet cable into the WAN port.

Make sure there is an available DHCP server on, and there are available IP addresses in the server.

Try to set your WAN port to static IP client mode.

During a call, I cannot hear any voice

Make sure your handset is tightly connected with the phone.

Check whether you have muted the conversation or not.

Consult the outbound server details with your service provider.

I have problems sending DTMF digits during calls

Check which kind of DTMF you are using, and whether it is compatible with the server.

Consult the payload value with your service provider.

Time and date are not correct

Select the right time zone or enter the time information manually on the phone.

Check your DST settings.

How do I answer incoming calls during a call?

If a call comes in when you are in a conversation, press OK key to answer the incoming call.

How to refuse incoming calls during a call?

To refuse all incoming calls that may arrive when you are in a conversation you can turn off call waiting function or enable the DND mode by pressing the HOLD/DND button.

How to update the firmware?

Enter the webpage of your phone, go to System -> Upgrade.

1) Select the file to update, and then click the upgrade button.

Note: Make sure the firmware you choose is provided by your service provider, or the device may crash after the update.

How to auto provision?

Consult auto provision server address with your service provider.

Appendix A.

Line Key configuration menu

1.Type: Speed dial	➔	1.Type: Line	1.Type: Key Event						
⬇		⬇	⬇						
2.Account ID		2.Account ID	2.Key type: Call Return	➔	2.Key type: Pickup	➔	2.Key type: Call Park	➔	2.Key type: Voicemail
⬇		⬇			⬇		⬇		⬇
3.Value		3.User (R/Q)			3.Account		3.Account		3.Account
		⬇			⬇		⬇		⬇
		4.Server (R/Q)			4.Value		4.Value		4.Value

2.Key type: Prefix	➔	2.Key type: Conf	➔	2.Key type: Forward	➔	2.Key type: Transfer	➔	2.Key type: Hold	➔
⬇				⬇		⬇			⬇
3.Value				3.value		3.value			

Memory Key configuration menu

1.Type: Speed dial	➔	N/A	➔	1.Type: Key Event		
⬇				⬇		
2.Account				2.Key type: Call Return	➔	2.Key type: Redial
⬇						
3.Value						

Service

If trouble is experienced with this equipment, for repair or warranty information, please contact customer service at 1-800-511-3180. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

This product may be serviced only by the manufacturer or its authorized service agents. Changes or modifications not expressly approved by Telefield NA Inc. could void the user's authority to operate this product. For instructions on how to obtain service, refer to the warranty included in this guide or call customer service at 1-800-511-3180.

Or refer inquires to:

Telefield NA Inc.
Manager, Consumer Relations
4915 SW Griffith Dr. #205
Beaverton, Or 97005

Attach your sales receipt to the booklet for future reference or jot DOWN the date this product was purchased or received as a gift. This information will be valuable if service should be required during the warranty period.

Purchase date _____

Name of store, installer or dealer _____

Warranty

Limited Warranty

What your warranty covers:

- Defects in materials or workmanship

For how long after your purchase:

- Two years, from date of purchase

What we will do:

- Provide you with a replacement unit. The exchange unit is under warranty for the remainder of the original product's warranty period.

How you get service:

- Locate your proof of purchase in the form of a bill of sale or receipted invoice which is evidence

that the product is within the warranty period. Proof of warranty eligibility is required and must be presented to obtain warranty service.

- Contact RCA Customer Care at (800) 511-3180. Our representatives will help you troubleshoot and diagnose the problem. As you may be asked to disconnect your RCA telephone from it's power source, you must call from another telephone. If the issue cannot be resolved by our Customer Care Team, you will be issued an RMA (Return Merchandise Authorization) number and be given instructions on how to submit your proof-of-purchase paperwork and where to send your defective merchandise.

- You will be responsible for shipping the defective unit back to our warranty fulfillment center at your own expense. You are responsible for damage or loss during shipment so insuring the product during return shipping is highly recommended.

- We will ship a replacement to you freight pre-paid.

What your warranty does not cover:

- Customer instruction. (Your Instruction BoOK provides information regarding operating instructions and user controls. Additionally, our Customer Care Center is staffed 24x7 with product experts that can assist you with any questions that may arise during setup and use of your RCA telephone.
- Installation and setup service adjustments
- Batteries, if applicable
- Damage from misuse or neglect
- Products that have been modified or serviced outside the USA
- Products purchased from non-authorized retailers, dealers or resellers

- Products purchased or serviced outside the USA
- Acts of nature, such as, but not limited to lightning damage
- 3rd party products, such as headsets

Product Registration:

- Please complete and mail the Product Registration Card packed with your unit. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

Limitation of Warranty:

- THE WARRANTY STATED ABOVE IS THE ONLY WARRANTY APPLICABLE TO THIS PRODUCT. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED (INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) ARE HEREBY DISCLAIMED. NO VERBAL OR WRITTEN INFORMATION GIVEN BY TELEFIELD NA INC., ITS AGENTS, OR EMPLOYEES SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY.
- REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. TELEFIELD NA INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. THIS DISCLAIMER OF WARRANTIES AND LIMITED WARRANTY ARE GOVERNED BY THE LAWS OF THE STATE OF OREGON. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

How state law relates to this warranty:

- Some states do not allow the exclusion nor limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts so the above limitations or exclusions may not apply to you.
- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your product outside the USA, Mexico or Canada:

This warranty does not apply. Contact your dealer for warranty information.

Visit the RCA web site at www.rca4business.com

Please do not send any products to the Oregon address listed in this manual or on the carton. This will only add delays in service for your product.

**Telefield NA Inc.
4915 SW Griffith Dr. #205
Beaverton, Or 97005**

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Model IP110
T0001157 (Rev.0 E)
12-15
Printed in China